Remarks

Reconsideration of this Application is respectfully requested.

Upon entry of the foregoing Amendment, claims 1-27 are pending in the application, with claims 1, 14 and 21 being the independent claims. Claims 2-4 and 6-13 have been amended to correct editorial informalities only and have not been amended to overcome any objection or rejection. The amendments are believed not to be narrowing. New claims 14-27 have been added to recite additional features of the present invention, and consideration as to their merits is respectfully requested.

Based on the above Amendment and the following Remarks, Applicant respectfully requests that the Examiner reconsider all outstanding rejections and that they be withdrawn.

Rejections under 35 U.S.C. § 112

The Office Action at page 2 rejected claims 1-13 under 35 U.S.C. § 112, second paragraph, as being indefinite. Claims 1 and 5 have been amended to overcome the rejection and are submitted to be definite. Claims 2-4 and 6-13 variously depend from claims 1 and 5 and are submitted to be definite.

Rejections under 35 U.S.C. § 102 & 103

In the Office Action at pages 2-5, claims 1-6 and 9-10 were rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 4,370,607 to Dassonville ("Dassonville"), claims 7-8 were rejected under 35 U.S.C. § 103 as being unpatentable over Dassonville, and

claims 11-13 were rejected under 35 U.S.C. § 103 as being unpatentable over Dassonville in view of U.S. Patent No. 5,070,441 to Ashley ("Ashley"). The rejections are respectfully traversed.

Amended claim 1 recites a switching arrangement comprising a plurality of modules. Each module carries ***two current transformer secondary windings***, and there is a primary transformer loop in the form of a transmission line. The transmission line is common to each module. The transmission line ***couples with the two transformer windings of each module.*** The switching arrangement is illustrated in Fig. 2, for example, which discloses a plurality of modules (e.g., 5 and 6). Each module carries two current transformer secondary windings (e.g., 11 and 12), and there is a primary transformer loop (e.g., 18) in the form of a transmission line. The transmission line (e.g., 18) is common to each module (e.g., 5 and 6) and is coupled with the two transformer windings (e.g., 11-12) of each module.

Dassonville ***fails*** to teach or fairly suggest ***each module carrying two current transformer secondary windings*** and ***a transmission line which couples with the two transformer windings of each module.*** In Fig. 4 of Dassonville, each switch (e.g., each thyristor in box 1a) appears to be controlled by a secondary winding, wherein each of the secondary windings are arranged around a corresponding toroidal core (e.g., one of the toroidal cores TR1-TRn1). The toroidal cores TR1-TRn1 couple the secondary windings to the primary winding LP1. However, in Dassonville, each switching module (e.g., each thyristor in box 1a) carries only one secondary winding and does ***not*** carry two transformer windings. Further, the primary

winding LP1 is ***not*** coupled with two transformer windings of each module (e.g., each thyristor in box 1a). Hence, Dassonville fails to teach or fairly suggest ***each module carrying two current transformer secondary windings*** and ***a transmission line which couples with the two transformer windings of each module***.

For at least these reasons, Dassonville fails to teach or suggest all of the elements of claim 1 and new independent claims 14 and 21. Also, for at least the reasons discussed with reference to claim 1, claims 2-10 and new claims 15-20 and 22-27 are also patentable over Dassonville.

Ashley ***fails*** to overcome the above discussed deficiencies of Dassonville. Ashley appears to disclose in Fig. 2 an apparatus for distributing electrical power from a six phase powerline to both single phase and three phase loads. However, Ashley fails to teach or fairly suggest ***each module carrying two current transformer secondary windings*** and ***a transmission line which couples with the two transformer windings of each module***.

For at least the above discussed reasons, Applicant respectfully submits that claim 1 is allowable over the applied references, alone or in combination. Applicant further notes for at least these reasons, Dassonville and Ashley, alone or in combination, do not teach or suggest all of the elements of claims 2-13, or new claims 14-27.

Amended claim 3 recites that two current transformer secondary windings on a module have an equal number of ***opposite turns***. In Fig. 2 of the present application, the primary winding 18, where it is adjacent to a first secondary winding 11 carried by a module 5, extends in a first direction along the secondary winding 11, and, because of the bends placed on the primary

winding 18 as shown in Fig. 2, the primary winding, where it is adjacent to a second secondary winding 12 carried by the same module 5, extends in a second direction opposite the first direction. Because of such change in the direction that the primary winding 18 extends, the present invention is able to have a configuration where the "module includes two secondary windings 11 and 12 of a current transformer which are wound in opposite directions." See specification at page 5, lines 8-9. As a result of having two windings with opposite turns, Applicant submits that fault and stray currents cancel out as a benefit.

Dassonville ***fails*** to disclose or fairly suggest that two current transformer secondary windings on a module have an equal number of ***opposite turns***. Instead, according to Fig. 1 of Dassonville, the secondary windings LSa-n appear to be wound in the same direction. Further, in Fig. 4, the secondary windings appear to be wound in the same direction because, unlike the present invention, the primary winding LP1 is ***straight without bends*** and, hence, secondary windings with opposite turns are ***not*** desirable. In the present invention, two secondary windings (e.g., 11-12 in Fig. 2) of a module (e.g., 5 in Fig. 2) have opposite turns because the primary winding (e.g, 18 in Fig. 2) has curves and parts of it extend in opposite directions. Dassonville ***fails*** to show that the primary winding LP1 in Fig. 4 extends in ***opposite directions***. Hence, in Dassonville, there is ***no*** apparent reason for having secondary windings with ***opposite turns***. Applicant respectfully submits that Dassonville ***fails*** to disclose or fairly suggest that two current transformer secondary windings on a module have an equal number of ***opposite turns***.

Ashley ***fails*** to overcome the above discussed deficiencies of Dassonville in relation to claim 3. Ashley ***fails*** to disclose or fairly suggest that two current transformer secondary windings on a module have an equal number of ***opposite turns***.

Hence, for at least the above discussed reasons, Applicant respectfully submits that claim 3 is allowable over the applied references.

Conclusion

All of the stated grounds of rejection have been properly traversed or accommodated. Applicant therefore respectfully requests that the Examiner reconsider all presently outstanding rejections and that they be withdrawn. Applicant believes that a full and complete reply has been made to the outstanding Office Action and, as such, the present application is in condition for allowance. If the Examiner believes, for any reason, that personal communication will expedite prosecution of this application, the Examiner is hereby invited to telephone the undersigned.

Prompt and favorable consideration of this Amendment and the allowance of claims 1-27 are respectfully requested.

Respectfully submitted,

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